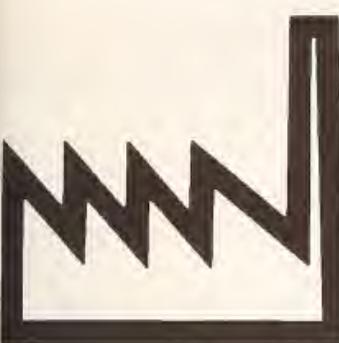


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PRELIMINARY REPORT INDUSTRY SERIES

1987 Census of Manufactures

MC87-I-28D(P)
Issued June 1989

SOAP, CLEANERS, AND TOILET GOODS

Industries 2841, 2842, 2843, and 2844

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.¹

INDUSTRY 2841, SOAP AND OTHER DETERGENTS

In the 1987 Census of Manufactures, Industry 2841, Soap and Other Detergents, had employment of 31.4 thousand. The employment figure was 11 percent below the 35.4 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 3 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$11.5 billion.

In 1987, establishments in this industry accounted for 91 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 91 also. The products primary to this industry appear in table 2 and aggregated to \$9.6 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$5.6 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2842, POLISHES AND SANITATION GOODS

In the 1987 Census of Manufactures, Industry 2842, Polishes and Sanitation Goods, had employment of 20.3 thousand. The employment figure was 12 percent below the 23.0 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 4 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$5.5 billion.

In 1987, establishments in this industry accounted for 76 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 78. The products primary to this industry appear in table 2 and aggregated to \$5.1 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$1.9 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2843, SURFACE ACTIVE AGENTS

In the 1987 Census of Manufactures, Industry 2843, Surface Active Agents, had employment of 8.9 thousand.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call Andrew W. Hait (301) 763-2510.



U.S. Department of Commerce
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The employment figure was 5 percent above the 8.5 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 6 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$3.0 billion.

In 1987, establishments in this industry accounted for 75 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 65. The products primary to this industry appear in table 2 and aggregated to \$2.8 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$1.7 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 2844, TOILET PREPARATIONS

In the 1987 Census of Manufactures, Industry 2844, Toilet Preparations, had employment of 58.4 thousand. The employment figure was 3 percent below the 60.4 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 1 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$14.4 billion.

In 1987, establishments in this industry accounted for 87 percent of products considered primary to the industry regardless of the industry in which they were produced (coverage ratio). In 1982, the coverage ratio was 89. The products primary to this industry appear in table 2 and aggregated to \$14.7 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$3.9 billion in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

| | |
|--------|--|
| - | Represents zero. |
| (D) | Withheld to avoid disclosing data for individual companies; data are included in higher level totals. |
| (NA) | Not available. |
| (NC) | Not comparable. |
| (S) | Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review. |
| (X) | Not applicable. |
| (Z) | Less than half the unit shown. |
| do | Ditto. |
| n.e.c. | Not elsewhere classified. |
| n.s.k. | Not specified by kind. |
| pt. | Part. |
| r | Revised. |
| SIC | Standard Industrial Classification. |

Other abbreviations, such as lb, gal, yd, doz, bbl, and tons, are used in the customary sense.

CONTACTS FOR DATA USERS

| Subject Area | Contact | Phone |
|---------------------------------|------------------------------------|----------------|
| Census/ASM | | |
| Durables | Kenneth Hansen | (301) 763-7304 |
| Nondurables | Michael Zampogna | (301) 763-2510 |
| Current Industrial Reports | | |
| Durables | Malcolm Bernhardt | (301) 763-2518 |
| Nondurables | Thomas Flood | (301) 763-5911 |
| Import/Export Publications | Foreign Trade Division | (301) 763-5140 |
| Industry Analysis and Forecasts | International Trade Administration | (202) 377-4356 |

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.]

| Year ¹ | All establishments ² | | All employees | | Production workers | | | Value added by manufacture ³ (million dollars) | Cost of materials (million dollars) | Value of shipments (million dollars) | New capital expenditures (million dollars) | Ratios | | | |
|---|---------------------------------|-------|------------------------------|-------------|---------------------------------|----------------|---------------------------|---|-------------------------------------|--------------------------------------|--|--------------------------|--------------------|------|------|
| | | | Companies ² (no.) | Total (no.) | With 20 employees or more (no.) | Number (1,000) | Payroll (million dollars) | | | | | Specialization (percent) | Coverage (percent) | | |
| INDUSTRY 2841, SOAP AND OTHER DETERGENTS | | | | | | | | | | | | | | | |
| 1987 Census | (NA) | 753 | 225 | 31.4 | 949.2 | 19.2 | 39.0 | 538.2 | 5 852.0 | 5 647.7 | 11 510.2 | 337.7 | 1 206.3 | 80 | 91 |
| 1986 ASM | (NA) | (NA) | (NA) | 32.3 | 974.5 | 19.4 | 40.4 | 543.1 | 4 639.1 | 5 703.2 | 10 346.1 | 287.7 | 1 179.6 | (NA) | (NA) |
| 1985 ASM | (NA) | (NA) | (NA) | 34.1 | 946.0 | 20.0 | 40.0 | 528.1 | 4 481.8 | 5 529.7 | 10 052.7 | 317.0 | 1 215.7 | (NA) | (NA) |
| 1984 ASM | (NA) | (NA) | (NA) | 32.8 | 896.7 | 19.2 | 40.8 | 494.2 | 4 366.8 | 5 184.4 | 9 468.4 | 318.9 | 1 144.5 | (NA) | (NA) |
| 1983 ASM | (NA) | (NA) | (NA) | 35.5 | 860.5 | 21.3 | 42.9 | 490.6 | 4 282.5 | 4 780.6 | 9 116.6 | 240.9 | 1 046.1 | (NA) | (NA) |
| 1982 Census | 642 | 723 | 232 | 35.4 | 827.1 | 21.2 | 42.5 | 457.1 | 4 777.1 | 4 371.9 | 9 167.3 | 261.9 | 1 059.9 | 84 | 91 |
| 1981 ASM | (NA) | (NA) | (NA) | 36.0 | 804.2 | 22.5 | 46.2 | 463.3 | 4 391.9 | 4 770.6 | 9 101.8 | 189.3 | 1 069.2 | (NA) | (NA) |
| 1980 ASM | (NA) | (NA) | (NA) | 35.1 | 714.8 | 22.4 | 45.8 | 419.2 | 4 353.2 | 3 979.8 | 8 274.9 | 212.4 | 995.4 | (NA) | (NA) |
| 1979 ASM | (NA) | (NA) | (NA) | 33.1 | 639.0 | 21.5 | 44.0 | 377.1 | 3 353.1 | 3 635.1 | 6 915.0 | 180.4 | 872.5 | (NA) | (NA) |
| 1978 ASM | (NA) | (NA) | (NA) | 32.3 | 569.3 | 20.9 | 41.9 | 339.3 | 3 143.2 | 3 337.4 | 6 407.8 | 143.2 | 781.3 | (NA) | (NA) |
| 1977 Census | 554 | 635 | 225 | 32.1 | 521.6 | 20.5 | 41.0 | 308.1 | 2 867.5 | 2 817.9 | 5 671.4 | 134.9 | 643.4 | 84 | 89 |
| 1976 ASM | (NA) | (NA) | (NA) | 29.8 | 445.2 | 19.7 | 39.2 | 268.0 | 2 664.9 | 2 581.8 | 5 201.9 | 124.9 | 591.4 | (NA) | (NA) |
| 1975 ASM | (NA) | (NA) | (NA) | 29.4 | 397.9 | 19.3 | 38.1 | 241.2 | 2 249.2 | 2 383.3 | 4 675.6 | 107.2 | 536.0 | (NA) | (NA) |
| 1974 ASM | (NA) | (NA) | (NA) | 30.9 | 385.3 | 20.0 | 40.5 | 229.7 | 2 267.4 | 2 216.3 | 4 383.9 | 103.5 | 592.1 | (NA) | (NA) |
| 1973 ASM | (NA) | (NA) | (NA) | 32.4 | 371.2 | 20.9 | 41.3 | 222.0 | 2 011.3 | 1 699.4 | 3 758.7 | 77.0 | 379.9 | (NA) | (NA) |
| 1972 Census | 577 | 642 | 199 | 31.5 | 341.6 | 20.4 | 40.9 | 205.9 | 2 038.8 | 1 373.7 | 3 394.4 | 90.7 | 381.7 | 83 | 90 |
| INDUSTRY 2842, POLISHES AND SANITATION GOODS | | | | | | | | | | | | | | | |
| 1987 Census | (NA) | 698 | 206 | 20.3 | 491.5 | 13.0 | 26.1 | 257.9 | 3 604.1 | 1 913.8 | 5 513.6 | 116.9 | 439.5 | 72 | 76 |
| 1986 ASM | (NA) | (NA) | (NA) | 21.1 | 478.5 | 13.2 | 27.9 | 259.1 | 3 080.1 | 1 854.4 | 4 927.7 | 105.7 | 435.5 | (NA) | (NA) |
| 1985 ASM | (NA) | (NA) | (NA) | 20.2 | 443.2 | 12.8 | 26.4 | 238.6 | 2 792.6 | 1 758.0 | 4 540.7 | 78.0 | 412.3 | (NA) | (NA) |
| 1984 ASM | (NA) | (NA) | (NA) | 21.9 | 459.8 | 13.8 | 28.2 | 252.0 | 2 794.4 | 2 144.9 | 4 902.1 | 87.3 | 468.9 | (NA) | (NA) |
| 1983 ASM | (NA) | (NA) | (NA) | 21.2 | 432.0 | 13.4 | 27.4 | 238.2 | 2 781.4 | 1 942.5 | 4 717.0 | 55.9 | 445.9 | (NA) | (NA) |
| 1982 Census | 747 | 807 | 219 | 23.0 | 443.7 | 14.6 | 29.1 | 236.1 | 2 626.2 | 1 974.4 | 4 613.7 | 80.9 | 463.2 | 74 | 78 |
| 1981 ASM | (NA) | (NA) | (NA) | 24.2 | 421.7 | 15.2 | 28.5 | 218.3 | 2 564.3 | 2 219.5 | 4 747.2 | 93.4 | 412.0 | (NA) | (NA) |
| 1980 ASM | (NA) | (NA) | (NA) | 24.6 | 392.6 | 14.7 | 26.9 | 176.3 | 2 226.4 | 1 919.0 | 4 129.7 | 66.2 | 396.8 | (NA) | (NA) |
| 1979 ASM | (NA) | (NA) | (NA) | 24.5 | 357.5 | 14.8 | 26.6 | 156.1 | 2 022.3 | 1 744.3 | 3 725.8 | 56.8 | 350.8 | (NA) | (NA) |
| 1978 ASM | (NA) | (NA) | (NA) | 23.1 | 312.8 | 15.6 | 29.6 | 168.1 | 1 925.0 | 1 658.8 | 3 562.4 | 71.5 | 302.3 | (NA) | (NA) |
| 1977 Census | 943 | 1 018 | 237 | 22.0 | 274.1 | 14.1 | 27.2 | 148.3 | 1 663.7 | 1 478.5 | 3 136.2 | 51.8 | 273.5 | 76 | 79 |
| 1976 ASM | (NA) | (NA) | (NA) | 23.5 | 276.3 | 13.5 | 26.7 | 130.0 | 1 451.5 | 1 346.3 | 2 775.4 | 51.5 | 252.4 | (NA) | (NA) |
| 1975 ASM | (NA) | (NA) | (NA) | 23.8 | 264.0 | 13.5 | 25.9 | 120.6 | 1 285.7 | 1 204.7 | 2 491.9 | 42.1 | 233.9 | (NA) | (NA) |
| 1974 ASM | (NA) | (NA) | (NA) | 24.4 | 245.4 | 13.8 | 26.9 | 113.8 | 1 205.0 | 1 026.6 | 2 197.8 | 35.2 | 245.6 | (NA) | (NA) |
| 1973 ASM | (NA) | (NA) | (NA) | 25.5 | 231.5 | 14.6 | 28.8 | 106.0 | 1 165.8 | 821.5 | 1 971.8 | 51.9 | 171.1 | (NA) | (NA) |
| 1972 Census | 1 022 | 1 108 | 243 | 25.1 | 216.9 | 14.7 | 28.6 | 100.5 | 1 118.1 | 758.6 | 1 867.6 | 54.3 | 151.6 | 81 | 83 |
| INDUSTRY 2843, SURFACE ACTIVE AGENTS | | | | | | | | | | | | | | | |
| 1987 Census | (NA) | 214 | 98 | 8.9 | 285.2 | 4.6 | 9.8 | 131.3 | 1 303.0 | 1 676.2 | 2 979.8 | 103.9 | 340.0 | 75 | 75 |
| 1986 ASM | (NA) | (NA) | (NA) | 9.5 | 286.9 | 4.4 | 9.5 | 115.6 | 1 182.8 | 1 590.2 | 2 779.5 | 71.4 | 331.2 | (NA) | (NA) |
| 1985 ASM | (NA) | (NA) | (NA) | 9.3 | 261.9 | 4.4 | 9.2 | 106.3 | 1 095.9 | 1 449.5 | 2 534.4 | 76.4 | 313.2 | (NA) | (NA) |
| 1984 ASM | (NA) | (NA) | (NA) | 9.3 | 253.4 | 4.5 | 9.4 | 103.7 | 1 013.2 | 1 494.2 | 2 481.9 | 76.7 | 306.7 | (NA) | (NA) |
| 1983 ASM | (NA) | (NA) | (NA) | 9.3 | 238.8 | 4.3 | 8.9 | 93.6 | 1 426.8 | 2 275.8 | 88.8 | 280.0 | (NA) | (NA) | |
| 1982 Census | 181 | 210 | 96 | 8.5 | 208.2 | 3.8 | 7.9 | 77.4 | 747.8 | 1 314.3 | 2 067.2 | 86.6 | 259.8 | 81 | 65 |
| 1981 ASM | (NA) | (NA) | (NA) | 7.9 | 182.7 | 3.9 | 8.6 | 72.4 | 952.4 | 1 138.9 | 2 061.5 | 82.1 | 197.6 | (NA) | (NA) |
| 1980 ASM | (NA) | (NA) | (NA) | 7.4 | 153.2 | 3.6 | 7.6 | 57.9 | 744.3 | 980.0 | 1 732.3 | 61.8 | 171.8 | (NA) | (NA) |
| 1979 ASM | (NA) | (NA) | (NA) | 6.8 | 127.6 | 3.4 | 7.2 | 52.8 | 571.9 | 795.0 | 1 358.6 | 87.9 | 161.0 | (NA) | (NA) |
| 1978 ASM | (NA) | (NA) | (NA) | 7.0 | 123.7 | 3.9 | 8.3 | 56.4 | 458.6 | 748.8 | 1 183.5 | 109.1 | 162.1 | (NA) | (NA) |
| 1977 Census | 149 | 175 | 84 | 6.5 | 101.7 | 3.7 | 7.7 | 47.2 | 345.0 | 602.6 | 943.5 | 40.9 | 116.2 | 81 | 55 |
| 1976 ASM | (NA) | (NA) | (NA) | 7.4 | 106.1 | 3.9 | 8.0 | 48.1 | 328.4 | 548.6 | 867.8 | 35.6 | 117.1 | (NA) | (NA) |
| 1975 ASM | (NA) | (NA) | (NA) | 6.7 | 91.4 | 3.7 | 7.8 | 42.4 | 269.7 | 431.0 | 705.6 | 34.7 | 100.6 | (NA) | (NA) |
| 1974 ASM | (NA) | (NA) | (NA) | 7.8 | 95.2 | 4.4 | 9.2 | 46.6 | 334.3 | 483.0 | 797.5 | 31.6 | 117.4 | (NA) | (NA) |
| 1973 ASM | (NA) | (NA) | (NA) | 6.3 | 73.2 | 3.4 | 6.8 | 32.5 | 211.3 | 277.7 | 488.5 | 25.1 | 66.6 | (NA) | (NA) |
| 1972 Census | 151 | 178 | 86 | 6.9 | 71.5 | 3.8 | 7.7 | 32.3 | 209.5 | 257.0 | 462.6 | 19.7 | 61.4 | 81 | 60 |
| INDUSTRY 2844, TOILET PREPARATIONS | | | | | | | | | | | | | | | |
| 1987 Census | (NA) | 682 | 271 | 58.4 | 1 343.5 | 35.4 | 71.4 | 633.1 | 10 635.6 | 3 878.1 | 14 423.9 | 225.4 | 1 728.2 | 95 | 87 |
| 1986 ASM | (NA) | (NA) | (NA) | 58.8 | 1 388.1 | 33.8 | 66.0 | 615.4 | 9 725.1 | 3 647.0 | 13 332.9 | 276.9 | 1 563.5 | (NA) | (NA) |
| 1985 ASM | (NA) | (NA) | (NA) | 59.8 | 1 250.4 | 34.7 | 66.0 | 582.8 | 8 975.6 | 3 527.1 | 12 426.9 | 291.0 | 1 422.2 | (NA) | (NA) |
| 1984 ASM | (NA) | (NA) | (NA) | 60.9 | 1 208.4 | 35.9 | 67.6 | 566.5 | 8 310.0 | 3 450.2 | 11 664.9 | 231.3 | 1 363.4 | (NA) | (NA) |
| 1983 ASM | (NA) | (NA) | (NA) | 60.9 | 1 142.5 | 36.3 | 69.9 | 536.6 | 7 603.0 | 3 338.8 | 10 925.1 | 245.4 | 1 248.8 | (NA) | (NA) |
| 1982 Census | 596 | 639 | 257 | 60.4 | 1 102.1 | 35.8 | 68.6 | 520.7 | 7 130.6 | 3 026.3 | 10 183.2 | 220.7 | 1 136.0 | 96 | 89 |
| 1981 ASM | (NA) | (NA) | (NA) | 54.1 | 91.5 | 33.5 | 63.9 | 453.4 | 5 972.8 | 2 785.0 | 8 688.2 | 197.3 | 1 107.9 | (NA) | (NA) |
| 1980 ASM | (NA) | (NA) | (NA) | 54.9 | 853.7 | 34.0 | 65.7 | 436.5 | 5 413.3 | 2 450.4 | 7 874.1 | 193.1 | 974.0 | (NA) | (NA) |
| 1979 ASM | (NA) | (NA) | (NA) | 54.0 | 773.8 | 34.9 | 65.8 | 402.5 | 5 190.5 | 2 286.6 | 7 422.2 | 150.7 | 981.0 | (NA) | (NA) |
| 1978 ASM | (NA) | (NA) | (NA) | 54.1 | 721.7 | 33.6 | 62.4 | 356.9 | 4 957.2 | 2 329.0 | 7 228.1 | 134.5 | 869.4 | (NA) | (NA) |
| 1977 Census | 644 | 693 | 192 | 50.9 | 627.9 | 32.8 | 62.9 | 318.9 | 4 526.7 | 2 059.4 | 6 557.2 | 105.6 | 760.3 | 95 | 87 |
| 1976 ASM | (NA) | (NA) | (NA) | 49.2 | 587.4 | 32.1 | 62.4 | 293.1 | 4 024.5 | 1 906.5 | 5 893.6 | 75.7 | 678.4 | (NA) | (NA) |
| 1975 ASM | (NA) | (NA) | (NA) | 48.3 | 524.7 | 30.3 | 58.0 | 266.0 | 3 443.2 | 1 698.2 | 5 154.8 | 70.6 | 674.8 | (NA) | (NA) |
| 1974 ASM | (NA) | (NA) | (NA) | 48.2 | 495.2 | 30.4 | 59.4 | 250.6 | 3 266.0 | 1 555.1 | 4 767.9 | 58.9 | 694.1 | (NA) | (NA) |
| 1973 ASM | (NA) | (NA) | (NA) | 49.6 | 463.6 | 31.2 | 59.5 | 235.2 | 3 096.1 | 1 283.7 | 4 358.5 | 72.8 | 536.2 | (NA) | (NA) |
| 1972 Census | 593 | 646 | 205 | 48.2 | 428.2 | 31.8 | 61.0 | 219.6 | 2 834.1 | 1 241.1 | 4 057.3 | 71.4 | 469.4 | 94 | 86 |

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 2841, 8%; SIC 2842, 12%; SIC 2843, 11%; and SIC 2844, 9%.

¹In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during year.

⁴Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.

⁵Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text.]

| 1987 product code | Product | 1987 | | | 1982 | | |
|-------------------------|--|---|--------------------------------|-------------------------------|---|--------------------------------|-------------------------------|
| | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | |
| | | | Quantity ² | Value (million dollars) | | Quantity ² | Value (million dollars) |
| 2841- -- | SOAP AND OTHER DETERGENTS³ | | | | | | |
| | Total | (NA) | (X) | 9 572.3 | (NA) | (X) | 7 852.3 |
| 28411 -- | Soap and detergents, nonhousehold | (NA) | (X) | 1 819.5 | (NA) | (X) | 1 538.5 |
| | Soaps, except specialty cleaners, nonhousehold (bulk products and products sold in containers holding more than 25 lb or more than 1 gallon, for industrial, institutional, or commercial use): | | | | | | |
| 28411 12 | Chips, flakes, granulated, powdered, and sprayed, including washing powders | mil lb | (NA) | *195.8 | 85.5 | 37 | **328.9 |
| 28411 14 | Liquid (potash and other, excluding shampoos) | mil gal | (NA) | (S) | 91.8 | 36 | 12.4 |
| 28411 19 | Other soaps, nonhousehold, including mechanics' hand soap | mil lb | (NA) | 168.9 | 103.2 | 27 | **43.2 |
| | Alkaline detergents, nonhousehold (bulk products and products sold in containers holding more than 25 lb or more than 1 gallon, for industrial, institutional, or commercial use): | | | | | | |
| 28411 21 | Machine dishwashing compounds: Liquid | mil gal | (NA) | *20.6 | 95.5 | 29 | *10.9 |
| 28411 23 | Dry | mil lb | (NA) | 158.8 | 162.7 | 39 | *299.0 |
| 28411 24 | Scouring cleaners | do | (NA) | 101.1 | 44.5 | 9 | 50.3 |
| | Other alkaline detergents, nonhousehold: | | | | | | |
| 28411 25 | Liquid | mil gal | (NA) | *70.0 | 322.4 | 106 | *62.7 |
| | Dry | | | | | | |
| 28411 26 | Hard surface cleaners | mil lb | (NA) | 214.2 | 85.8 | 65 | **355.6 |
| 28411 28 | Other alkaline detergents | do | (NA) | 76.6 | 56.7 | 29 | (S) 151.2 |
| | Synthetic organic detergents, nonhousehold (bulk products and products sold in containers holding more than 25 lb or more than 1 gallon, for industrial, institutional, or commercial use): | | | | | | |
| 28411 41 | Dry (powders): Anionic base | mil lb | (NA) | 136.2 | 133.8 | 27 | *189.7 |
| 28411 43 | Nonionic base or other | do | (NA) | 87.4 | 40(S) | 30 | (S) 109.2 |
| | Liquid: | | | | | | |
| 28411 45 | Anionic base | mil gal | (NA) | 455.6 | 102.6 | 41 | (S) 122.8 |
| 28411 46 | Cationic and amphoteric | do | (NA) | 5.8 | 32.5 | 14 | *4.4 |
| 28411 49 | Nonionic base or other base | do | (NA) | *36.3 | 107.3 | 39 | (S) 21.7 |
| | Acid-type cleaners, containing an acid and/or wetting agent, and/or inorganic fillers: | | | | | | |
| 28411 62 | Dairy, farm, and food plant cleaners, sanitizers, etc.: Dry | mil lb | (NA) | 28.0 | 17.6 | 14 | (S) 12.3 |
| | Liquid: | | | | | | |
| 28411 65 | Halogenated | mil gal | (NA) | 15.9 | 32.7 | 14 | (S) 12.9 |
| 28411 67 | Nonhalogenated | do | (NA) | (S) | 91.2 | 27 | **13.0 |
| | Metal cleaners: | | | | | | |
| 28411 73 | Dry | mil lb | (NA) | **12.6 | 14.5 | 24 | (S) 28.4 |
| 28411 77 | Liquid | mil gal | (NA) | 7.7 | 44.1 | 37 | (S) 56.6 |
| 28411 79 | All other | | (NA) | (X) | 48.4 | 22 | (S) 40.7 |
| 28411 00 | Soaps and detergents, nonhousehold, n.s.k. | | (NA) | (X) | 106.5 | (NA) | (X) 76.7 |
| 28412 -- | Household detergents | | (NA) | (X) | 5 244.6 | (NA) | (X) 4 349.3 |
| | Alkaline detergents, household (products sold in containers holding 25 lb or less or 1 gallon or less; for use by family units): | | | | | | |
| 28412 01 | Machine dishwashing compounds: Liquid | mil gal | (NA) | (S) | 113.6 | 7 | (S) 11.5 |
| 28412 03 | Dry | mil lb | (NA) | *419.5 | 247.4 | 15 | 644.2 |
| | Liquid hard surface cleaners, including general-purpose cleaners and degreasers: | | | | | | |
| 28412 07 | Aerosol and spray type (including refills for refillable containers) | mil gal | (NA) | 15.3 | 64.9 | 11 | 15.5 |
| 28412 08 | Other liquid | do | (NA) | 21.7 | 106.8 | 11 | (S) 52.1 |
| 28412 12 | Scouring cleaners | mil lb | (NA) | 429.4 | 234.0 | 7 | (D) 50.3 |
| | Other alkaline detergents, household: | | | | | | |
| 28412 15 | Liquid | mil gal | (NA) | (D) | (D) | 11 | (D) 28.4 |
| 28412 18 | Dry (including hard surface cleaners) | mil lb | (NA) | (D) | (D) | 9 | (D) 56.6 |
| | Synthetic organic detergents, household (products sold in containers holding 25 lb or less or 1 gallon or less; for use by family units): | | | | | | |
| 28412 21 | Dry (solid or powders): Light-duty | mil lb | (NA) | 212.9 | 93.8 | 13 | (S) 40.7 |
| | Heavy-duty: | | | | | | |
| 28412 24 | Phosphate based | mil lb | (NA) | 2 644.1 | 1 548.6 | 18 | 2 641.4 |
| 28412 26 | Phosphate free | do | (NA) | 1 051.7 | 464.5 | 18 | 759.5 |
| | Liquid, excluding shampoos: | | | | | | |
| 28412 31 | Light-duty | mil gal | (NA) | (S) | 497.6 | 21 | 176.8 |
| 28412 35 | Heavy-duty | do | (NA) | 330.2 | 1 173.2 | 16 | (S) 831.6 |
| 28412 61 | Presoaks | mil lb | (NA) | 118.6 | 134.3 | 12 | (S) 565.1 |
| 28412 00 | Household detergents, n.s.k. | | (NA) | (X) | 34.5 | (NA) | (X) 128.0 |
| 28413 -- | Soaps, except specialty cleaners, household: Products sold in containers holding 25 lb or less or 1 gallon or less; for use by family units: | | (NA) | (X) | 1 422.9 | (NA) | (X) 30.2 |
| 28413 11 | Toilet soaps, excluding medicated soaps: Bars | mil lb | (NA) | 940.9 | 1 193.5 | 32 | 893.3 |
| 28413 15 | Liquid | mil gal | (NA) | 31.0 | 136.5 | 14 | 25.5 |
| 28413 22 | Chips, flakes, granulated, powdered, and sprayed, including washing powders | mil lb | (NA) | | | 11 | (S) 78.6 |
| 28413 97 | Other soaps, household, including mechanics' hand soaps (except waterless), medical, and medicated soaps (containing medicinal or germicidal additives of therapeutic value but not soaps containing germicidal or other additives only as a deodorant), bars, liquid, and paste | | (NA) | (X) | 89.1 | 14 | (X) 90.3 |
| | | | (NA) | | | | 56.7 |

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

| 1987 product code | Product | 1987 | | | 1982 | | |
|-------------------------|---|---|--------------------------------|-------------------------------|---|--------------------------------|-------------------------------|
| | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | |
| | | | Quantity ² | Value (million dollars) | | Quantity ² | Value (million dollars) |
| 2841- -- | SOAP AND OTHER DETERGENTS³—Con. | | | | | | |
| 28413 -- | Soaps, except specialty cleaners, household—Con. | | | | | | |
| | Products sold in containers holding 25 lb or less or 1 gallon or less; for use by family units—Con. | | | | | | |
| 28413 00 | Soaps, except specialty cleaners, n.s.k. ----- | (NA) | (X) | 3.7 | (NA) | (X) | 34.0 |
| 28414 -- | Glycerin, natural ⁴ ----- | (NA) | (X) | 181.5 | (NA) | (X) | 153.7 |
| 28414 11 | Crude, 100 percent basis ----- mil lb----- | (NA) | 48.4 | 40.5 | 9 | 101.2 | 54.2 |
| 28414 31 | High-gravity, dynamite, and yellow distilled 100 percent basis ----- do----- | (NA) | 24.4 | 20.6 | 5 | 81.2 | 58.7 |
| 28414 51 | Chemically pure, 100 percent basis ----- do----- | (NA) | 166.5 | 118.8 | 5 | *58.2 | 38.2 |
| 28414 00 | Glycerin, natural, n.s.k. ----- | (NA) | (X) | 1.6 | (NA) | (X) | 2.6 |
| 28410 -- | Soap and other detergents, n.s.k. ----- | (NA) | (X) | 903.9 | (NA) | (X) | 590.2 |
| 28410 00 | Soap and other detergents, n.s.k., typically for establishments with 10 employees or more (see note) ----- | (NA) | (X) | 419.5 | (NA) | (X) | 431.8 |
| 28410 02 | Soap and other detergents, n.s.k., typically for establishments with less than 10 employees (see note) ----- | (NA) | (X) | 484.4 | (NA) | (X) | 158.4 |
| 2842- -- | POLISHES AND SANITATION GOODS | | | | | | |
| | Total ----- | (NA) | (X) | 5 090.1 | (NA) | (X) | 4 047.1 |
| 28422 -- | Household bleaches ----- | (NA) | (X) | 812.3 | (NA) | (X) | 528.4 |
| 28422 43 | Household liquid bleaches (sodium hypochlorite, etc.) (for additional detail, see Current Industrial Report MA-28A, Inorganic Chemicals) ----- | (NA) | (X) | 607.1 | 40 | (X) | 385.4 |
| 28422 53 | Household dry bleaches (calcium hypochlorite, etc.) (for additional detail, see Current Industrial Report MA-28A, Inorganic Chemicals) ----- | (NA) | (X) | 196.3 | 19 | (X) | 137.8 |
| 28422 00 | Household bleaches n.s.k. ----- | (NA) | (X) | 9.0 | (NA) | (X) | 5.3 |
| 28423 -- | Specialty cleaning and sanitation products ----- | (NA) | (X) | 2 699.0 | (NA) | (X) | 2 327.8 |
| 28423 11 | Glass window cleaning preparations ----- | (NA) | (X) | 200.5 | 51 | (X) | 179.1 |
| 28423 21 | Oven cleaners ----- | (NA) | (X) | 59.1 | 18 | (X) | 57.3 |
| 28423 26 | Toilet bowl cleaners ----- | (NA) | (X) | 238.4 | 54 | (X) | 177.7 |
| 28423 28 | Drain pipe solvents ----- | (NA) | (X) | 75.5 | 27 | (X) | 81.8 |
| 28423 32 | Disinfectants, for uses other than agricultural ----- | (NA) | (X) | 375.6 | 86 | (X) | 345.7 |
| 28423 42 | Dry cleaning spotting preparations (liquid, gels, and solid) ----- | (NA) | (X) | 14.6 | 15 | (X) | 17.4 |
| | Household laundry aids: | | | | | | |
| 28423 44 | Fabric softeners and rinses: | | | | | | |
| | Liquid ----- | (NA) | (X) | 478.3 | 34 | (X) | 348.3 |
| 28423 45 | Dry ----- | (NA) | (X) | 224.0 | 7 | (X) | 298.4 |
| | Laundry starch preparations, including permanent types (resins, starch, etc.): | | | | | | |
| 28423 47 | Aerosol and other spray types ----- | (NA) | (X) | 57.7 | 10 | (X) | 53.9 |
| 28423 49 | Other, liquid and dry ----- | (NA) | (X) | 15.3 | 7 | (X) | 10.2 |
| | Rug and upholstery cleaners: | | | | | | |
| 28423 51 | Consumer type preparations ----- | (NA) | (X) | 129.5 | 34 | (X) | 97.3 |
| 28423 53 | Industrial and institutional ----- | (NA) | (X) | 39.5 | (5) | (X) | (5) |
| 28423 71 | Household ammonia ----- | (NA) | (X) | 30.2 | 16 | (X) | 33.1 |
| | Deodorants, nonpersonal: | | | | | | |
| 28423 81 | Aerosol type ----- | (NA) | (X) | 77.2 | 18 | (X) | 62.9 |
| 28423 85 | Other ----- | (NA) | (X) | 276.2 | 48 | (X) | 170.4 |
| 28423 95 | Other specialty detergents, including sweeping compounds, waterless hand cleaners, ironing aids, and cleaners for wallpaper, window shades, and walls ----- | (NA) | (X) | 264.8 | 5120 | (X) | 5249.9 |
| 28423 00 | Specialty cleaning and sanitation products, n.s.k. ----- | (NA) | (X) | 142.6 | (NA) | (X) | 144.3 |
| 28424 -- | Polishing preparations and related products ----- | (NA) | (X) | 797.6 | (NA) | (X) | 648.0 |
| 28424 11 | Automobile body polish and cleaners ----- | (NA) | (X) | 185.1 | 41 | (X) | 108.2 |
| 28424 15 | Furniture polish and cleaners ----- | (NA) | (X) | 155.3 | 23 | (X) | 142.3 |
| | Floor polish: | | | | | | |
| 28424 21 | Water emulsion ----- mil gal----- | (NA) | 29.4 | 203.7 | 74 | 32.7 | 191.3 |
| 28424 23 | Liquid (nonemulsion) ----- do----- | (NA) | 5.9 | 33.4 | 21 | (S) | 24.9 |
| 28424 25 | Other than liquid form, including paste and cake ----- mil lb----- | (NA) | (S) | 7.9 | 6 | *6.7 | 7.2 |
| | Shoe polishes and cleaners: | | | | | | |
| 28424 42 | Liquid ----- mil gal----- | (NA) | (S) | 23.1 | 9 | 1.8 | 26.6 |
| 28424 44 | Paste and cake ----- mil lb----- | (NA) | 2.7 | 19.7 | 9 | 5.2 | 27.9 |
| 28424 63 | Leather dressings and finishes, excluding shoe polish ----- do----- | (NA) | (S) | 45.9 | 11 | (S) | 31.7 |
| 28424 98 | Related products, including metal polish and polishing cloths and papers ----- | (NA) | (X) | 81.1 | 38 | (X) | 51.5 |
| 28424 00 | Polishing preparations and related products, n.s.k. ----- | (NA) | (X) | 42.4 | (NA) | (X) | 36.5 |
| 28420 -- | Polishes and sanitation goods, n.s.k. ----- | (NA) | (X) | 781.1 | (NA) | (X) | 542.9 |
| 28420 00 | Polishes and sanitation goods, n.s.k., typically for establishments with 10 employees or more (see note) ----- | (NA) | (X) | 521.7 | (NA) | (X) | 431.2 |
| 28420 02 | Polishes and sanitation goods, n.s.k., typically for establishments with less than 10 employees (see note) ----- | (NA) | (X) | 259.4 | (NA) | (X) | 111.7 |

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text.]

| 1987 product code | Product | 1987 | | | 1982 | | |
|-------------------------|---|---|---|-------------------------------|---|---|-------------------------------|
| | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | | Number of companies with shipments of \$100,000 or more | Product shipments ¹ | |
| | | | Quantity ² | Value (million dollars) | | Quantity ² | Value (million dollars) |
| 2843- -- | SURFACE ACTIVE AGENTS | | | | | | |
| | Total | (NA) | (X) | 2 835.7 | (NA) | (X) | 2 495.7 |
| 28430 -- | Surface active agents, finishing agents, and assistants: Assistants and finishes, textile and leather, except surface active agents and tanning agents: | | | | | | |
| 28430 31 | Assistants: Textile ----- mil lb-- | (NA) | 225.6 | 112.7 | 27 | *142.4 | 84.5 |
| 28430 35 | Leather ----- do-- | (NA) | (6) | (6) | 5 | 43.2 | 19.6 |
| 28430 61 | Finishes: Textile ----- mil lb-- | (NA) | 220.3 | 115.6 | 33 | 196.3 | 89.7 |
| 28430 65 | Leather ----- do-- | (NA) | *27.0 | *22.4 | 6 | (S) | 30.9 |
| 28430 85 | Bulk surface active agents (for detailed statistics, see U.S. ITC publication, Synthetic Organic Chemicals, 1987 and 1982) (including all bulk surface active agents that reduce surface tension of water or other solvents and are used chiefly as detergents, dispersing agents, emulsifiers, foaming agents, or wetting agents in either aqueous or nonaqueous systems, excluding surface active ingredients in formulated products) | | | | | | |
| 28430 00 | Surface active agents, finishing agents, and assistants, n.s.k., typically for establishments with 10 employees or more (see note) ----- | (NA) | (X) | 2 283.0 | 123 | (X) | 2 036.9 |
| 28430 02 | Surface active agents, finishing agents, and assistants, n.s.k., typically for establishments with less than 10 employees (see note) ----- | (NA) | (X) | 229.2 | (NA) | (X) | 193.6 |
| | | | | | | | |
| 1987 product code | Product | 1987 | | | 1982 | | |
| | | Number of companies with shipments of \$100,000 or more | Value of product shipments ¹ (million dollars) | | Number of companies with shipments of \$100,000 or more | Value of product shipments ¹ (million dollars) | |
| | | | | | | | |
| 2844- -- | TOILET PREPARATIONS | | | | | | |
| | Total | (NA) | 14 729.6 | (NA) | | | |
| 28441 -- | Shaving preparations ----- | (NA) | 480.7 | (NA) | | | |
| 28441 49 | Shaving soap and cream ----- | (NA) | 206.2 | 23 | | | |
| 28441 56 | Aftershave preparations (all forms) ----- | (NA) | 260.0 | 26 | | | |
| 28441 59 | Other shaving preparations, including preshave preparations and styptics ----- | (NA) | 12.9 | 7 | | | |
| 28441 00 | Shaving preparations, n.s.k. ----- | (NA) | 1.5 | (NA) | | | |
| 28442 -- | Perfumes, toilet water, and colognes ----- | (NA) | 1 990.9 | (NA) | | | |
| 28442 11 | Perfume oil mixtures and blends ----- | (NA) | 415.8 | 36 | | | |
| 28442 23 | Perfumes ----- | (NA) | 205.0 | 33 | | | |
| 28442 35 | Toilet waters ----- | (NA) | 219.7 | 23 | | | |
| 28442 45 | Colognes ----- | (NA) | 965.1 | 40 | | | |
| 28442 00 | Perfumes, toilet water, and colognes, n.s.k. ----- | (NA) | 185.2 | (NA) | | | |
| 28443 -- | Hair preparations (including shampoos) ----- | (NA) | 3 597.5 | (NA) | | | |
| | Shampoos, including products with additives for tints, coloring, or dandruff removal: | | | | | | |
| 28443 11 | Containing soap: Professional ----- | (NA) | 28.0 | 13 | | | |
| 28443 12 | Consumer use ----- | (NA) | 253.5 | 30 | | | |
| | Synthetic organic detergents: Liquid: | | | | | | |
| 28443 14 | Professional ----- | (NA) | 76.3 | 25 | | | |
| 28443 15 | Consumer use ----- | (NA) | 831.5 | 52 | | | |
| 28443 18 | Cream and gels ----- | (NA) | 38.9 | 7 | | | |
| | Hair tonics, including hair and scalp conditioners: | | | | | | |
| 28443 20 | Professional ----- | (NA) | 70.4 | 22 | | | |
| 28443 22 | Consumer use ----- | (NA) | 423.2 | 41 | | | |
| | Hair mousse: | | | | | | |
| 28443 25 | Professional ----- | (NA) | 8.4 | (?) | | | |
| 28443 27 | Consumer use ----- | (NA) | 74.0 | (?) | | | |
| | Perms: | | | | | | |
| 28443 36 | Home (complete and refill) ----- | (NA) | 112.7 | 17 | | | |
| 28443 39 | Commercial ----- | (NA) | 210.7 | 21 | | | |
| 28443 41 | Hair dressings, including brilliantines, creams, and pomades ----- | (NA) | 108.5 | 15 | | | |
| 28443 51 | Hair coloring preparations (bleaches, dyes, rinses, tints, etc.) ----- | (NA) | 567.8 | 15 | | | |
| | Hair spray: | | | | | | |
| 28443 63 | Aerosol ----- | (NA) | 372.5 | 31 | | | |
| 28443 64 | Nonaerosol ----- | (NA) | 224.7 | 25 | | | |
| 28443 65 | Hair rinses (excluding color rinses) ----- | (NA) | 34.8 | 11 | | | |
| 28443 95 | Other hair preparations, including heat setting wave solutions ----- | (NA) | 96.4 | 720 | | | |
| 28443 00 | Hair preparations (including shampoos), n.s.k. ----- | (NA) | 65.2 | (NA) | | | |
| 28444 -- | Dentifrices, including mouthwashes, gargles, and rinses ----- | (NA) | 1 309.2 | (NA) | | | |
| 28444 21 | Toothpaste, including gels and tooth powder ----- | (NA) | 838.8 | 18 | | | |
| 28444 71 | Mouthwashes, rinses, and breath fresheners (except antiseptic) ----- | (NA) | | | | | |
| 28444 95 | Other oral hygiene products, including dental floss, dental adhesives, and denture cleaner, excluding toothbrushes and toothpicks ----- | (NA) | 468.8 | 29 | | | |
| 28444 00 | Dentifrices, including mouthwashes, gargles, and rinses, n.s.k. ----- | (NA) | 1.6 | (NA) | | | |

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

| 1987 product code | Product | 1987 | | 1982 | |
|-------------------------|---|---|---|---|---|
| | | Number of companies with shipments of \$100,000 or more | Value of product shipments ¹ (million dollars) | Number of companies with shipments of \$100,000 or more | Value of product shipments ¹ (million dollars) |
| 2844- -- | TOILET PREPARATIONS—Con. | | | | |
| 28445 -- | Other cosmetics and toilet preparations | (NA) | 6 454.5 | (NA) | 4 266.5 |
| 28445 02 | Creams, excluding shaving, hair, and deodorant: | | | | |
| 28445 03 | Cleansing creams | (NA) | 182.3 | 31 | 177.7 |
| 28445 04 | Foundation creams | (NA) | 493.7 | 22 | 143.4 |
| 28445 05 | Lubricating creams, including hormone creams | (NA) | 370.9 | 22 | 186.3 |
| | Other creams | (NA) | 167.6 | 23 | 106.1 |
| | Lotions and oils (excluding hair, shaving preparations, and bath): | | | | |
| 28445 08 | Suntan lotions and oils | (NA) | 135.7 | 22 | 96.1 |
| 28445 09 | Sunscreens and sunblocks | (NA) | 69.1 | | |
| 28445 16 | Cleansing lotions | (NA) | 124.5 | 23 | 89.0 |
| 28445 17 | Cosmetic oils, including baby oils but excluding suntan oils | (NA) | 25.6 | 15 | 32.4 |
| 28445 18 | Hand lotions | (NA) | 399.1 | 44 | 206.8 |
| 28445 19 | Other lotions and oils, excluding hair, shaving, and bath | (NA) | 276.5 | 21 | 244.2 |
| 28445 21 | Lip preparations (lipstick, lip gloss, lip conditioners, etc.) | (NA) | 502.5 | 34 | 395.5 |
| 28445 22 | Blushers | (NA) | 154.3 | 28 | 161.6 |
| 28445 23 | Eye preparations (mascara, eye shadow, eye liners, eye creams, etc.) | (NA) | 656.3 | 33 | 499.0 |
| 28445 25 | Feminine hygiene douches (except medicated) | (NA) | (*) | 5 | (*) |
| | Deodorant (personal): | | | | |
| | Underarm: | | | | |
| 28445 27 | Aerosol and spray type | (NA) | 263.2 | 18 | 239.0 |
| 28445 28 | Roll-on, solids, etc. | (NA) | 724.2 | 37 | 491.0 |
| 28445 29 | Feminine hygiene deodorants, all types | (NA) | (*) | 7 | 43.2 |
| | Manicuring preparations: | | | | |
| 28445 31 | Nail enamels and polishes | (NA) | 281.7 | 28 | 234.0 |
| 28445 33 | Nail enamel and polish removers | (NA) | 49.9 | 15 | 42.9 |
| 28445 39 | Other manicuring preparations (including nail and cuticle conditioners) | (NA) | 49.8 | 8 | 39.8 |
| | Powder: | | | | |
| 28445 41 | Talcum and toilet powder | (NA) | 213.8 | 35 | 213.2 |
| 28445 43 | Face powder (pressed and loose) | (NA) | 136.6 | 25 | 111.5 |
| 28445 50 | Other powder, including foot powder, etc. | (NA) | 47.2 | 14 | 42.6 |
| 28445 55 | Premoistened towelettes, including wipes for babies | (NA) | 244.0 | 7 | 43.6 |
| 28445 59 | Facial scrubs and masks | (NA) | 53.1 | (*) | (*) |
| 28445 61 | Bath salts, tablets, oils, and bubble baths | (NA) | 151.0 | 37 | 169.2 |
| 28445 91 | Depilatories | (NA) | 21.5 | 6 | 15.6 |
| 28445 99 | Other cosmetics and toiletries | (NA) | 391.9 | 23 | 212.0 |
| 28445 00 | Other cosmetics and toilet preparations, n.s.k. | (NA) | 268.5 | (NA) | 30.7 |
| 28440 -- | Toilet preparations, n.s.k. | (NA) | 896.8 | (NA) | 598.9 |
| 28440 00 | Toilet preparations, n.s.k., typically for establishments with 5 employees or more (see note) | (NA) | 530.0 | (NA) | 458.9 |
| 28440 02 | Toilet preparations, n.s.k., typically for establishments with less than 5 employees (see note) | (NA) | 366.8 | (NA) | 140.0 |

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

¹Data reported by all producers, not just those with shipments of \$100,000 or more.

²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

³Definitions for specified product: Alkaline detergents—Mixtures designated primarily for cleaning hard surfaces such as dishes, floors, walls, counters, vehicles, appliances, etc. Soap—Products including combinations of synthetic organic surface active agents and alkaline detergents, containing more than 25 percent anhydrous soap. Heavy-duty phosphate-based detergents—Detergents products for laundry applications with a substantial phosphate builder. Light-duty detergents—Detergent products for hand dishwashing and for fine fabrics with little or no phosphate builder. Presoaks—Products containing essentially one or more of the following ingredients: alkaline compounds, synthetic organic surface active agents, soap, and soil releasing agents, such as (but not confined to) protease, amylase, and lipases (enzymes).

⁴Data on quantities of glycerine produced are shown in Current Industrial Report M20K, Fats and Oils - Production, Consumption, and Factory Warehouse Stock (synthetic and natural), and U.S. International Trade Commission Report Synthetic Organic Chemicals, U.S. Production and Sales (synthetic only).

⁵For 1982, product code 2842353 was included with product code 2842395.

⁶For 1987, product code 2843035 is combined with product code 2843065 to avoid disclosing data for individual companies.

⁷For 1982, products codes 2844325 and 2844327 were not collected separately and were reported under product code 2844395.

⁸For 1987, product codes 2844525 and 2844529 are combined with product code 2844599 to avoid disclosing data for individual companies. For 1982, product code 2844525 was combined with product code 2844599 for the same reason.

⁹For 1982, product code 2844559 was not collected separately and was reported under product code 2844599.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

| 1987 material code | Material | 1987 | | 1982 | |
|---|--|-----------------------|--|-----------------------|--|
| | | Quantity ¹ | Delivered cost (million dollars) | Quantity ¹ | Delivered cost (million dollars) |
| INDUSTRY 2841, SOAP AND OTHER DETERGENTS | | | | | |
| | Materials, containers, and supplies | (X) | 5 123.1 | (X) | 3 689.4 |
| 284303 | Bulk surface active intermediates (active wt) mil lb-- | 313.9 | 125.5 | 174.0 | 91.5 |
| | Bulk surface active agents, excluding surface active intermediates, other than sulfonated oils and assistants: | | | | |
| 284305 | Primarily for detergent purposes (active wt) mil lb-- | 382.4 | 173.2 | 499.5 | 211.6 |
| 284306 | Other emulsifiers, wetting agents, penetrants, etc. (active wt) do-- | 63.6 | 24.5 | 111.9 | 40.0 |
| 284141 | Glycerin (100%) do-- | 19.5 | 10.6 | 42.7 | 27.5 |
| 207011 | Vegetable oil do-- | 287.1 | 53.9 | (S) | 55.5 |
| 284421 | Perfume oil mixtures and blends do-- | 555.3 | 392.2 | **15.9 | 67.7 |
| 289921 | Fatty acids do-- | 72.0 | 22.5 | 228.1 | 63.9 |
| 207711 | Grease and inedible tallow do-- | 502.4 | 100.3 | 278.0 | 52.8 |
| 281211 | Chlorine (100% Cl) 1,000 s tons-- | (S) | 11.7 | (S) | 19.1 |
| 281976 | Sodium sulfate (100%) do-- | 476.0 | 40.9 | 471.8 | 60.5 |
| 281228 | Sodium carbonate (soda ash) (58% Na ₂ O) do-- | 626.0 | 70.0 | 569.2 | 73.4 |
| 281238 | Sodium hydroxide (caustic soda) (100% NaOH) do-- | *514.9 | 57.1 | (S) | 89.8 |
| 281972 | Sodium tripolyphosphate (STPP) (100% Na ₅ P ₃ O ₁₀) do-- | 427.3 | 281.9 | 526.0 | 348.1 |
| | Sodium silicates: | | | | |
| 281978 | Water glass type (100%) 1,000 s tons-- | 72.6 | 15.1 | (S) | 37.8 |
| 281979 | Other, including meta silicate, orthosilicate, and sesquisilicate (100%) do-- | 203.6 | 33.3 | (S) | 34.0 |
| 281904 | Sulfur compounds, including sulfur trioxide (SO ₃), sulfuric acid, and oleum (100% H ₂ SO ₄) do-- | *353.6 | 65.9 | 433.6 | 46.1 |
| 291002 | Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc., except surface active intermediates | (X) | 34.0 | (X) | 101.9 |
| 284102 | Finished synthetic organic detergents, in bulk, requiring no further chemical processing | (X) | 46.7 | (X) | 40.6 |
| 280008 | All other organic and inorganic chemicals, n.e.c. | (X) | 872.2 | (X) | (3) |
| 270011 | Labels, coupons, instructions, and other printed materials | (X) | 212.5 | (X) | 60.7 |
| | Containers: | | | | |
| 265001 | Paperboard containers, boxes, and corrugated paperboard | (X) | 495.7 | (X) | 260.9 |
| 340001 | Metal | (X) | 36.0 | (X) | 81.2 |
| 322101 | Glass | (X) | 4.5 | (S) | 13.7 |
| 308015 | Plastics | (X) | 510.2 | (X) | 286.9 |
| 970099 | All other materials and components, parts, containers, and supplies | (X) | 869.9 | (X) | 31 178.4 |
| 971000 | Materials, containers, and supplies, n.s.k. ² | (X) | 562.8 | (X) | 345.8 |
| INDUSTRY 2842, POLISHES AND SANITATION GOODS | | | | | |
| | Materials, containers, and supplies | (X) | 1 710.9 | (X) | 1 699.7 |
| 284303 | Bulk surface active intermediates (active wt) mil lb-- | *18.8 | 8.4 | (S) | 8.4 |
| | Bulk surface active agents, excluding surface active intermediates, other than sulfonated oils and assistants: | | | | |
| 284305 | Primarily for detergent purposes (active wt) mil lb-- | (S) | 65.9 | **132.8 | 59.6 |
| 284306 | Other emulsifiers, wetting agents, penetrants, etc. (active wt) do-- | **39.8 | 17.7 | 95.3 | 32.4 |
| 284141 | Glycerin (100%) do-- | (4) | (4) | (D) | (4) |
| 207011 | Vegetable oil do-- | (S) | 1.9 | *10.8 | 3.2 |
| 284421 | Perfume oil mixtures and blends do-- | *10.6 | 44.5 | (S) | 35.9 |
| 289921 | Fatty acids do-- | **16.9 | 5.8 | *14.3 | 6.3 |
| 207711 | Grease and inedible tallow do-- | (S) | 4.7 | *3.9 | 1.7 |
| 281211 | Chlorine (100% Cl) 1,000 s tons-- | **201.6 | 29.6 | *162.1 | 22.1 |
| 281976 | Sodium sulfate (100%) do-- | *12.3 | 2.0 | (S) | 2.6 |
| 281228 | Sodium carbonate (soda ash) (58% Na ₂ O) do-- | 103.5 | 12.1 | **123.5 | 11.7 |
| 281238 | Sodium hydroxide (caustic soda) (100% NaOH) do-- | 190.2 | 24.1 | *223.8 | 33.6 |
| 281972 | Sodium tripolyphosphate (STPP) (100% Na ₅ P ₃ O ₁₀) do-- | **11.8 | 4.3 | 18.0 | 11.1 |
| | Sodium silicates: | | | | |
| 281978 | Water glass type (100%) 1,000 s tons-- | (S) | .6 | *5.8 | .4 |
| 281979 | Other, including meta silicate, orthosilicate, and sesquisilicate (100%) do-- | (S) | 1.9 | (S) | 2.0 |
| 281904 | Sulfur compounds, including sulfur trioxide (SO ₃), sulfuric acid, and oleum (100% H ₂ SO ₄) do-- | (S) | .9 | (S) | 1.9 |
| 291002 | Refined petroleum products, including mineral oil, naphtha solvents, petrolatum, waxes, etc., except surface active intermediates | (X) | 40.1 | (X) | 44.5 |
| 284102 | Finished synthetic organic detergents, in bulk, requiring no further chemical processing | (X) | 16.6 | (X) | 10.8 |
| 280008 | All other organic and inorganic chemicals, n.e.c. | (X) | 222.4 | (X) | (3) |
| 270011 | Labels, coupons, instructions, and other printed materials | (X) | 28.1 | (X) | 24.4 |
| | Containers: | | | | |
| 265001 | Paperboard containers, boxes, and corrugated paperboard | (X) | 132.3 | (X) | 144.6 |
| 340001 | Metal | (X) | 139.2 | (X) | 97.1 |
| 322101 | Glass | (X) | 6.9 | (S) | 20.1 |
| 308015 | Plastics | (X) | 226.8 | (X) | 254.2 |
| 970099 | All other materials and components, parts, containers, and supplies | (X) | 4269.0 | (X) | 3 441.9 |
| 971000 | Materials, containers, and supplies, n.s.k. ² | (X) | 405.1 | (X) | 429.2 |

See footnotes at end of table.

Table 3. Materials Consumed by Kind: 1987 and 1982—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

| 1987 material code | Material | 1987 | | 1982 | |
|---|---|--|--|--|--|
| | | Quantity ¹ | Delivered cost (million dollars) | Quantity ¹ | Delivered cost (million dollars) |
| INDUSTRY 2843, SURFACE ACTIVE AGENTS | | | | | |
| | Materials, containers, and supplies | (X) | 1 486.1 | (X) | 1 178.9 |
| 284303 | Bulk surface active intermediates (active wt) mil lb | 118.5 | 70.5 | (S) | 87.3 |
| | Bulk surface active agents, excluding surface active intermediates other than sulfonated and assistants: | | | | |
| 284305 | Primarily for detergent purposes (active wt) mil lb | 150.6 | 55.6 | 196.3 | 76.6 |
| 284306 | Other emulsifiers, wetting agents, penetrants, etc. (active wt) | 109.3 | 44.6 | (S) | 33.1 |
| 284141 | Glycerine (100%) | 10.7 | 7.7 | .3 | 2.5 |
| 207011 | Vegetable oil | 123.0 | 32.0 | *35.6 | 10.9 |
| 284421 | Perfume oil mixtures and blends | (S) | .2 | .4 | .4 |
| 289921 | Fatty acids | *197.4 | 55.2 | (S) | 24.5 |
| 207711 | Grease and inedible tallow | 147.3 | 29.8 | *62.1 | 10.6 |
| 281211 | Chlorine (100% Cl) | 1,000 s tons | **40.9 | (D) | (D) |
| 281976 | Sodium sulfate (100%) | do | (D) | (D) | (D) |
| 281228 | Sodium carbonate (soda ash) (56% Na ₂ O) | do | (S) | 1.2 | (D) |
| 281238 | Sodium hydroxide (caustic soda) (100% NaOH) | do | *40.7 | 48.4 | 7.7 |
| 281972 | Sodium tripolyphosphate (STPP) (100% Na ₅ P ₃ O ₁₀) | do | (S) | .5 | .1 |
| | Sodium silicates: | | | | |
| 281978 | Water glass type (100%) | 1,000 s tons | (D) | (D) | - |
| 281979 | Other, including meta silicate, orthosilicate, and sesquisilicate (100%) | do | (S) | .3 | .3 |
| 281904 | Sulfur compounds, including sulfur trioxide (SO ₃), sulfuric acid, and oleum (100% H ₂ SO ₄) | do | 57.1 | 9.1 | 107.4 |
| 291002 | Refined petroleum products, including mineral oil, naphtha solvents, petrodatum, waxes, etc., except surface active intermediates | (X) | 156.0 | (X) | 38.5 |
| 284102 | Finished synthetic organic detergents, in bulk, requiring no further chemical processing | (X) | 6.0 | (X) | (D) |
| 280008 | All other organic and inorganic chemicals, n.e.c. | (X) | 461.2 | (X) | (D) |
| 270011 | Labels, coupons, instructions, and other printed materials | (X) | .6 | (X) | (D) |
| | Containers: | | | | |
| 265001 | Paperboard containers, boxes, and corrugated paperboard | (X) | 13.2 | (X) | 8.6 |
| 340001 | Metal | (X) | 18.7 | (X) | 14.0 |
| 322101 | Glass | (X) | .2 | (D) | 1.1 |
| 308015 | Plastics | (X) | 2.4 | (X) | |
| 970099 | All other materials and components, parts, containers and supplies | (X) | 219.4 | (X) | 3757.7 |
| 971000 | Materials, containers, and supplies, n.s.k. ² | (X) | 246.5 | (X) | 81.7 |
| 1987 material code | Material | 1987 delivered cost (million dollars) | | 1982 delivered cost (million dollars) | |
| INDUSTRY 2844, TOILET PREPARATIONS | | | | | |
| | Materials, containers, and supplies | | 3 364.2 | | 2 728.3 |
| 284421 | Perfume oil mixtures and blends | | 210.1 | | 178.5 |
| 286931 | Perfume materials (synthetic organic) | | 49.3 | | 73.4 |
| 289951 | Essential oils, natural | | 102.4 | | 54.0 |
| 284307 | Bulk surface active agents other than sulfonated oils and fats | | 63.3 | | 125.1 |
| 207020 | Fats, oils, greases, and tallow (animal including lanolin and marine, and vegetable including carnauba and other vegetable waxes) | | 75.0 | | 64.5 |
| 281302 | Industrial gases, compressed and liquefied, including argon, carbon dioxide, nitrogen, and nitrous oxide, but excluding halogen | | 5.1 | | 13.5 |
| 291102 | Refined petroleum products, including mineral oil, naphtha, solvents, petrodatum, waxes, etc. | | 70.7 | | 67.8 |
| 286955 | Alcohols | | 59.5 | | 59.4 |
| 286906 | Other synthetic organic chemicals, including halogenated hydrocarbons | | 97.4 | | 296.6 |
| 281970 | Silicates | | 49.6 | | 32.2 |
| 308008 | Fabricated plastics products, except plastics containers | | 126.2 | | 127.6 |
| | Containers: | | | | |
| 308015 | Plastics | | 589.7 | | 431.6 |
| 322102 | Glass | | 147.5 | | 203.9 |
| 260091 | Paper and paperboard containers, including shipping sacks and other paper packaging supplies | | 366.4 | | 315.1 |
| 340001 | Metal | | 144.6 | | 123.8 |
| 970099 | All other materials and components, parts, containers, and supplies | | 427.6 | | 356.2 |
| 971000 | Materials, containers, and supplies, n.s.k. ² | | 779.8 | | 205.1 |

¹For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

²Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

³For 1982, material code 280008 was combined with material code 970099.

⁴For 1987 and 1982, material code 284141 was combined with material code 970099 to avoid disclosing data for individual companies.



APPENDIX

Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which serve manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies—A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees—Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers—Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power-plant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees—Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll—Includes the gross earnings for the "employees" defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours—Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials—Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)—In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers' records. Establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as "not specified by kind" (n.s.k.).

Value of shipments and other receipts—Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all

miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of "all other costs" (including company overhead and profit).

Shipments or production of individual products (table 2)—In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment—Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories—Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method.

Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios—An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio—Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

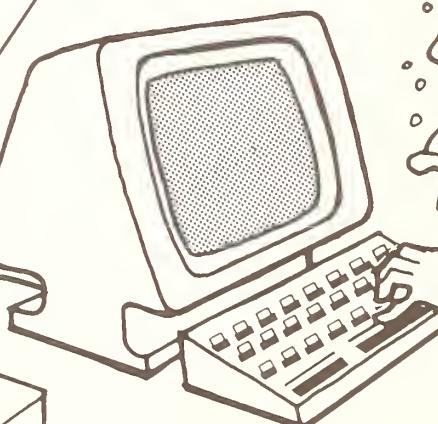
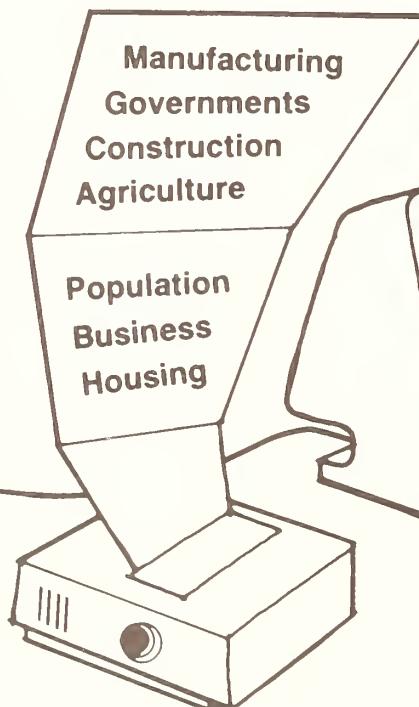
Coverage ratio—Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

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